

AMENDMENTS TO THE SPECIFICATION:

Please amend the indicated paragraphs of the specification in accordance with the amendments indicated below.

Page 5: 4th full paragraph bridging pages 5 and 6, through page 14, last paragraph, delete entirely and substitute with the following paragraphs indicated below:

(1) To overcome the drawbacks, the present invention is directed to a shower nozzle, wherein a holding portion having a water flow passage communicating with a hot/cold water inlet formed therein and a water spraying portion having a plurality of water passing holes provided therein are connected to each other through an open/close valve detachably disposed at one end portion of the holding portion or the water spraying portion to form a nozzle body, a push button is mounted on the other end of the water spraying portion, a shaft which performs the open/close operation of the open/close valve in an interlocking manner with the push button is arranged in the inside of the water spraying portion and, the shaft is vertically movable in an interlocking manner with the vertical movement generated by pushing the push button and with the rotational movement which is generated by the rotation of the push button, whereby a degree of opening of the open/close valve is adjustable.

Due to such a constitution, the direction that the push button is pushed and the direction that the open/close valve is opened become coaxial and hence, the shaft which transmits the manipulation of the push button to the open/close valve can be formed in a straight rod shape and can be arranged on a straight line whereby the structure becomes simple and the manipulation can be performed surely. Further, it is possible to push down the shaft by pushing the push button so as to bring the open/close valve into the open state. Then, by pushing the push button again, the push-down force generated by the shaft is released to bring the open/close valve into the closed state.

Further, by rotating the push button, the shaft is rotated in an interlocking manner with the push button and the shaft. is advanced or retracted in the axial direction in an interlocking manner with the rotational movement. Accordingly, it is possible to change the distance that the shaft pushes the open/close valve. That is, it is possible to change the area of water flow opening by changing the distance that the valve element is separated from the valve seat and hence, it is possible to perform not only water jetting and water stopping but also the flow rate adjustment by manipulating the push button. In this manner, by providing the flow rate adjusting function to the shower nozzle, it is possible to enhance the easy-to-use property or the availability of the shower nozzle.

Further, in the state that the shower nozzle is engaged with the shower hook, the push button is arranged on the upper end portion of the shower nozzle and hence,

it is possible to perform water jetting and water stopping by merely pushing the push button which is positioned on the upper end portion from above. Accordingly, the manipulation of the push button is facilitated even in the state that the shower nozzle is engaged with the shower hook.

Further, compared to the conventional shower nozzle which allows the manipulation of the push button only with the thumb, according to the shower nozzle of the present invention, the user can perform the open/close operation of the push button by pushing the push button to any parts of his/her body or an object in the vicinity of the shower nozzle and hence, the manipulation method is broadened.

(2) According to another aspect of the invention described, the push button and the open/close valve are detachably mounted.

Due to such a constitution, in the shower nozzle of the invention, it is possible to select the mounting of the open/close valve and the push button depending on the necessity.

(3) According to another aspect of the invention, an upper cap is detachably mounted on the other end portion of the water spraying portion, and either one of the mounting of the open/close valve and the push button and the mounting of the upper cap is selectable.

Due to such a constitution, it is possible to constitute two kinds of shower nozzles having different functions using all common parts and hence, it is possible to provide the shower nozzle at a low cost. Further, to consider the convenience of

a user, even when he/she uses the shower nozzle having neither the open/close valve nor the push button, the user can easily mount the open/close valve and the push button later. Alternatively, as an opposite case, the user can easily convert the shower nozzle provided with the push button which manipulates the open/close valve into the shower nozzle having neither the open/close valve nor the push button.

When the open/close valve and the push button are mounted, in a state that the shower nozzle is engaged with the shower hook, the push button is positioned on the upper end portion of the shower nozzle and the user can perform water jetting and water stopping by merely pushing the pushbutton positioned on the upper end portion from above. Accordingly, the push button can be easily manipulated even in the state that the shower nozzle is engaged with the shower hook. Further, compared to a conventional shower nozzle which allows the manipulation of the push button only with a thumb, in the shower nozzle of the present invention, it is possible to open or close the push button by merely pushing the push button to any part of a human body or an object arranged around the shower nozzle thus broadening a manipulating method.

(4) According to another aspect of the invention, an upper end portion of the shaft and a lower end portion of the push button are threadedly engaged with each other.

Due to such a constitution, it is possible to obtain the substantially equal manner of operation and advantageous effects as the shower nozzles described hereinabove and, at the same time, it is possible to simplify the constitution more.

(5) According to another aspect of the invention, the shaft is constituted of an upper shaft which is arranged on the push button side and a lower shaft which is arranged on the open/close valve side and, at the same time, end portions of the upper shaft and lower shaft are threadedly engaged with each other.

Due to such a constitution, it is possible to obtain the substantially equal manner of operation and advantageous effects as the shower nozzle described under (3) hereinabove and, at the same time, it is possible to provide the extremely simple constitution to the shower nozzle.

(6) According to another aspect of the invention, a portion of the above described nozzle body except for at least the water passing holes is covered with a detachable cover to which the surface treatment is applied and which also constitutes a separate body.

Due to such a constitution, in the shower nozzles described hereinabove, the erosion resistance of the appearance is enhanced. Further, in performing the surface treatment such as, for example, plating aiming at the enhancement of the aesthetic appearance, by covering the nozzle body with the cover to which the surface treatment is applied and constitutes the separate body, it is no more necessary to perform masking of the water flow passage and peeling-off of the plating of the water

flow portion after the whole surface treatment which are performed conventionally whereby the cost can be lowered. Further, it is possible to use covers of various surface treatments by exchanging their combination depending on a user's taste. Further, by constituting the holding portion which forms the water flow passage and the cover as separate bodies from each other, there is no possibility of the occurrence of cracks attributed to the thermal expansion and, at the same time, an air layer is formed between the cover and the holding portion thus providing a heat insulation effect.

(7) According to another aspect of the invention, an upper ring having a diameter larger than an outer diameter of the nozzle body portion is mounted on a distal end portion of the water spraying portion described hereinabove.

Due to such a constitution, in the shower nozzle described hereinabove, even when the shower nozzle falls, it is possible to absorb an impact using the upper ring and hence, there is no possibility that the nozzle body directly comes into contact with a flow surface at the time the nozzle body falls. Accordingly, the nozzle body is hardly injured and hence, even when the surface treatment such as plating or coating, for example, is applied to the nozzle body portion, there is no possibility that the surface treatment is damaged and the plating is peeled off.

(8) According to another aspect of the invention, the nozzle body described hereinabove is formed in an approximately cylindrical rod shape, a lower ring is mounted on a lower portion of the nozzle body, and the cover is arranged inside a

line which connects an outer periphery of the uppering and an outer periphery of the lower ring.

Due to such a constitution, in the shower nozzle described hereinabove, when the shower nozzle falls or is dragged on a flow surface, there is no possibility that the shower nozzle body directly comes into contact with the flow surface and hence, there is no fear that the shower body is damaged. Further, even when the surface treatment such as plating or coating is applied to the shower body, there is no possibility that the surface treatment is damaged and hence, there is no fear that a user is injured due to the peeling-off of the plating thus ensuring the safety. Further, since there is no possibility that the surface-treatment-applied portion is damaged, it is no more necessary to particularly increase a film thickness of plating, for example and hence, a weight of a product can be reduced and, at the same time, it is possible to manufacture at a low cost.

(9) According to another aspect of the invention, with respect to the plurality of water passing holes formed in the water spraying portion described hereinabove, the water passing holes which are positioned at an uppermost portion and a lowermost portion of the water spraying portion are formed to have a diameter larger than a diameter of other water passing holes.

Due to such a constitution, in a shower nozzle described hereinabove, it is possible to facilitate withdrawal of staying water in the inside of the water spraying

portion and hence, when the shower nozzle is engaged with a shower hook, it is possible to prevent the staying water from dropping continuously drop by drop.

(10) According to another aspect of the invention described, in the inside of the water spraying portion described hereinabove, a volume reducing unit which reduces a volume which allows the staying water communicating with water spraying holes when the shower nozzle is arranged vertically to be dwelled is arranged.

Due to such a constitution, in shower nozzles described hereinabove, it is possible to facilitate the withdrawal of the staying water in the inside of the water spraying portion and hence, when the shower nozzle is engaged with the shower hook in a vertical state, it is possible to effectively prevent the staying water from dropping continuously drop by drop.

Page 26: 3rd full paragraph, bridging pages 26 and 27, delete and substitute with the following paragraph indicated below:

That is, as show in Fig. 4, when the push button 16 is rotated, only the upper shaft 14 is rotated (the lower shaft 15 being not rotatable due to the rotation restricting portion 21a having the slit 21), the thread portions 20, 22 are engaged in the thread rotation. Accordingly, the lower shaft 15 is advanced or retracted in the vertical direction and hence, the distance E which constitutes a play between the distal end of the lower shaft 15 and the main valve 7 is changed whereby, the

distance which the shaft 11 pushes the main valve 7 as a whole can be adjusted. Here, among the vertical movement distance L of the push button 16, the distance E which constitutes the play and the degree of opening E' of the main valve 7, a following relationship is established.

Page 36: 2nd full paragraph, delete and substitute with the following paragraph indicated below:

According to the present invention, it is possible to provide the shower nozzle, wherein the holding portion having the water flow passage communicating with the hot/cold water inlet formed therein and the water spraying portion having the plurality of water passing holes provided therein are connected to each other through the open/close valve detachably disposed at one end portion of the holding portion or the water spraying portion to form the nozzle body, the push button is mounted on the other end of the water spraying portion, the shaft which performs the open/close operation of the open/close valve in an interlocking manner with the push button is arranged in the inside of the water spraying portion and, the shaft is vertically movable in an interlocking manner with the vertical movement generated by pushing the push button and with the rotational movement which is generated by the rotation of the push button, and hence, the degree of opening of the open/close valve is adjustable, whereby the push button for performing water jetting and water

stopping can be easily manipulated in the state of the shower nozzle engaged with the shower hook thus enhancing the easy-to-use property of the shower nozzle.

Page 37: 1st and 2nd full paragraphs, delete and substitute with the following paragraphs indicated below:

Further, with the provision of the flow rate adjusting function, it is possible to provide the shower nozzle which can further enhance the easy-to-use property thereof.

Still further, by detachably mounting the push button and the open/close valve, the shower nozzle can be easily converted into a type not having a water jetting and stopping function or a type having the water jetting and stopping function.